

CALIFORNIA'S HEALTH

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Public Health in Transition*

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Out-going presidents commonly use what is called the "point-with-pride and view-with-alarm" formula for their farewell addresses. This formula, however, has limited applicability to the present administration since there are few accomplishments to which we can point with pride. Likewise, there are many sins of omission, and the dangers which lie ahead are ill-defined.

However, when the public health field in this State is viewed broadly, there are several accomplishments to which we can point with pride. It is true, of course, that the bulk of the ground work, research, and investigation is the result of the untiring efforts of the various members of the staff of the State Department of Public Health. It is also true that the assistance with many of us as health officers have given is of the passive sort, consisting mainly of considering, criticizing, and, occasionally, approving the plans and programs which cost the state department staff many tedious hours of labor. It has frequently occurred to me that, in our presumption, we were merciless in our criticism of proposed plans and programs that we, as individuals, could not have produced. Credit must be given to the open-minded objectivity with which most of these state department men have viewed their own brain-children.

A year ago, at San Diego, we discussed the "Proposed Revision of the Milk Sanitation Section of the Agricultural Code" and the "Proposed Formula for State Participation in Local Health Department Budgets." Out of the convention came resolutions approving these two measures in addition to other important measures such as the resolution requesting a uniform and

improved restaurant sanitation act for the State of California.

By the time we reached Fresno, in February, most of these measures had been introduced in the Legislature and we were prepared to consider a wide variety of proposals, several of which are epoch-making—if not revolutionary. Such measures as the long-debated revision of the Milk Sanitation Section of the Agricultural Code (Senate Bill 344); Senate Bill 1470, the first legislative revision of the Restaurant Sanitation Act since 1909; Senate Bill 523, which provides for the commitment of mentally-ill patients to state institutions by local health officers; Senate Bill 315, which revises and essentially doubles the state grants-in-aid for the care of the tuberculous; and the vitally significant Assembly Bill 2223, providing state financial assistance for qualified local health departments; and many others, demanded and received our most thorough analytical study.

From there, the legislative battle was waged largely by the State Department of Public Health with an occasional assist by some of us on the sidelines. The credit, therefore, belongs to the State Department and its staff and, in review, the legislative year 1947 is a banner year for public health in California.

Gains Imply Larger Responsibility

However, these new and improved public health tools are not only great gains, but they, likewise, imply larger responsibility. There is one sentence in Section 1100 of A. B. 2223 which I believe should be read and reread dozens of times by every health officer in the

* Presidential address to the Health Officers' Department, League of California Cities, San Francisco, September 23.

State of California. We should diagram it, parse it, analyze it, and finally, digest it, until it becomes a part of us. It expresses in one sentence the solemn contract to which we have become the party of the second part. It reads as follows:

"The Legislature therefore seeks to further the provision of necessary public health services by granting financial assistance to cities, counties, and local health districts, thus enabling them to meet present and future needs in an efficient and effective manner."

As health officers, we must not let our intentness on means and method obscure the main objective. How much money we shall receive and how we plan to spend it are merely adjunctive to the main purpose of this legislation. Let us reword this sentence, as follows:

"The Legislature seeks (1) to provide necessary public health services to the people of the State of California, and (2) to assist health departments to meet present and future health needs in an efficient and effective manner."

There are two key phrases in this sentence—first, the phrase "necessary public health services" and, second, the words efficient and effective."

With \$3,000,000 the people of the State of California hope to buy something that has been sporadically distributed throughout the State. Even the basic "necessary public health services" are not uniformly available throughout the State. To some extent, these basic (necessary) services will vary from locality to locality. Areas with a high tuberculosis death rate call for an intensive tuberculosis control program, whereas, beach pollution studies would be useless in inland counties.

To convert services which have been traditionally ill-housed, poorly-equipped, under-manned, under-paid, and often poorly-trained, is a titanic undertaking which none of us can accomplish in one year. Yet, I suspect that next year's appropriation may be scaled, in part, to the progress we are able to make in the next six to nine months. The problem is not so much how can we spend the money, but actually, how much can we increase the efficiency and effectiveness of the public health program of the State of California.

Health officers, generally, have been noncommercial and self-denying in the best tradition of the medical profession. We have been rewarded, in part, by public confidence and esteem. If, under the pressing need for more personnel, we permit ourselves to be drawn into an undignified scramble for the limited available personnel, we will end up by "robbing Peter to pay Paul" without increasing the "efficiency and effectiveness" of the public health program of the State.

Coincidental to the problems of making basic services available where they do not now exist and increasing both the quantity and quality of public health services for all the State, is the problem of hours. Regardless of how desirable it may be or how much public health personnel, generally, may deserve it, is difficult to reconcile reduced hours of work with a bigger job to be done with limited personnel. The public esteem and confidence which public health enjoys (often to the envy of other departments of government) has been purchased by workers who gave their best without stint, by men who considered certain phases of their work to be as important on Sunday as on Monday! In our present under-staffed condition, any further reduction of working hours, without adequate coverage, comes dangerously close to legalized shirking.

The Job Ahead

Now to summarize the job ahead—to accomplish the two main objectives of Assembly Bill 2223 it appears that we must:

1. Work harder, and sometimes longer. "Easy Street" is farther away than most of us think.
2. Send more staff members away to schools for graduate work.
3. Provide more in-service training courses for those of us who must stay at home.
4. Adjust compensations to be more commensurate with wages paid for comparable work in industry, business, and the private practice of medicine.
5. Provide the essential material, without which the best worker can do only a poor job. This may include anything from new typewriters and posture chairs to laboratory equipment, instruments of precision for the sanitarian and the public health engineer, and modern X-ray equipment for tuberculosis case-finding.
6. And finally, we must provide adequate housing for our departments, quarters in which the public can be served with facility and dispatch and our staffs can work efficiently and effectively.

When this job is done, the transition will be complete—the horse-and-buggy health department will be a thing of the past!

Local Health Officer Changes

Dr. Burke E. Shoensee is now health officer of Imperial County, replacing Dr. E. H. Benson.

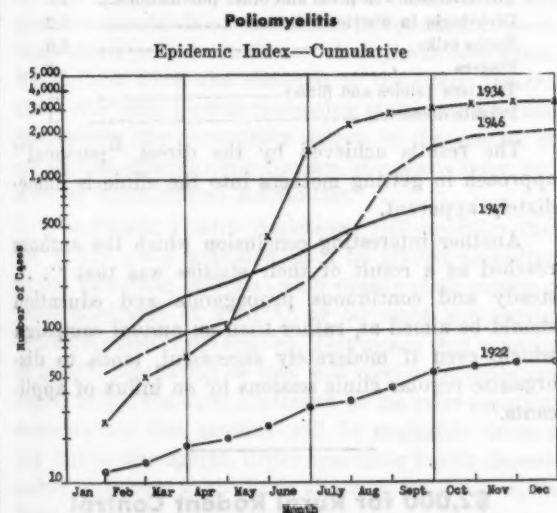
Dr. Paul Murphy is now acting health officer of Kings County. Ernest E. Foster, M.D., former health officer, recently died.

Poliomyelitis in California, 1947

Poliomyelitis has behaved in an unusual fashion in California in 1947. During the first three months of the year an unusually high number of cases were reported for the winter season. The majority of these patients were in Los Angeles County and probably represent the tail end of the 1946 epidemic. One of the reasons for the prolonged continuance of this outbreak may be related to the migration of large numbers of new susceptibles into the area. This increased incidence is shown on the chart presented below.

The chart shows that during the first six months of 1947, the incidence of poliomyelitis was higher than for the first half of 1946. Although during the summer the number of cases reported increased, the total has remained within the normal limits for the season.

Barring an unusual type of epidemic, the danger period in 1947 is probably past and the total number of cases for this year is expected to fall below that for 1946. (From Acute Communicable Disease Service).



NOTE—1934 Curve—Maximum incidence since 1920—3,396 cases. 1922 Curve—Minimum incidence since 1920—62 cases.
† SOURCE—California State Department of Public Health, Mortality Reports, 1922, 1934, 1946, 1947.

Sanitarians Select L. A. for 1949 Meeting

Los Angeles has been selected as the site of the National Association of Sanitarians' 1949 annual meeting.

The group decided on this State following an invitation from Dr. Wilton L. Halverson, State Director of Public Health.

A man too busy to take care of his health is like a mechanic too busy to take care of his tools.—*Cicero*.

Diphtheria Still Claims Many Lives in State and Nation

Diphtheria has often been used as an example of how the application of preventive procedures can effectively bring a dangerous enemy under control in a relatively short time.

The battle against this disease in the United States, however, is far from over. The phenomenal gains against diphtheria, which were especially large during the two decades up to 1940, were virtually brought to a halt in the war and postwar years. "This is a sharp reminder," reports the September *Statistical Bulletin*,* "that continued vigilance is the price of victory in our public health effort."

In the United States during 1946 there were 16,423 cases of this disease reported—about the same number as for each of the years from 1940 to 1942. Nearly 1,600 persons, most of them young children, died from diphtheria in the Nation in 1945, and the death toll for last year was about 1,300.

California has shown a 36 percent increase in the number of diphtheria cases reported since 1940 although 1946 figures were lower than those for 1945. This downward trend has continued during the first nine months of 1947.

Cases of diphtheria reported in California for 1940 through 1946 are as follows:

Year	Cases Reported
1940	893
1941	763
1942	883
1943	1,167
1944	1,215
1945	1,299
1946	1,192

Some of the factors which may have accounted for the increase are:

1. A greatly increased population with the introduction of new "susceptibles"—those lacking immunity—into the State.

2. Rapid jump in the birth rate during the war meant that a large group of children were susceptible to infection at a time when less medical personnel were available to give protective services against the disease.

* *Statistical Bulletin*, Metropolitan Life Insurance Company, September, 1947.

Health Education Now Accepted Teaching Major

Health education is now an accepted major for the general secondary teaching credential in California.

This action by the State Commission on Credentials was taken at the recommendation of the Division of Health Education, Physical Education and Recreation of the State Department of Education.

British Survey Reasons for Diphtheria Clinic Attendance

How to get the public to use facilities which have been set up for their benefit is a problem which has perplexed many a public health worker. Probably there is a different answer to the question for every community, and the health officials of one British city decided to find out more about it in their town. The results of their survey are reported in the July issue of the *Health Education Journal** and are summarized here. Newcastle Upon Tyne, England, may or may not be similar to any of California's communities, but some of its public health problems are essentially the same, and perhaps the solution to them is too.

First Study

Under the British system, diphtheria immunization centers are set up to give service to children under five years of age. The existence of these centers is given wide publicity and in a survey made in 1942 it was found that 92 percent of a random sample of 3,860 mothers had heard of the diphtheria immunization scheme. Despite the high percentage, response to diphtheria immunization appeals was poor. It was inferred from the survey that the poor response was not due to mere ignorance of its existence.

Scrutiny of the figures showed the following breakdown of "sources" from whom the existence of the centers had been learned:

	Percent
School	56
Child Welfare Service	18
Friends, neighbors, relations	9
Other sources (private doctor, district nurse, hospital, radio, newspaper, direct circularization by local authority, public posters, films, nursery school)	17

The most activating of all sources was the "private doctor, district nurse, and hospital" group, for of the 238 mothers who had heard of the scheme in this way, 54 percent had all of their children immunized. Of those who heard of the scheme through the child welfare service, 52 percent had all of their children immunized, and response from those who had heard of it from the school was 48 percent. The effectiveness of the other sources decreased in the following order: Direct circularization by local authority, radio, newspapers, friends, neighbors, relations, public posters, films, and nursery school.

Second Study

Following this survey, propaganda and educational activities concerning the need for diphtheria immunization were increased. To discover the relative success

of the various avenues of approach, it was decided to carry out a one year survey into the reasons why mothers brought their children for immunization. The survey was limited to the mothers of children between one and five years of age who attended the diphtheria immunization clinics, whether or not the child completed the full course of immunization. The survey does not presume to be a detailed statistical study, but is more of a rough assessment of the reasons why mothers in Newcastle Upon Tyne, England, have their children immunized against diphtheria. Although it is dangerous to assume that there can be only "one" reason, the results are reported here according to the source which was given by the mother.

Source	Percentage of mothers who brought children under 5 to diphtheria immunization center
Health visitor	32.9
General knowledge	29.0
Greetings card on first birthday	17.8
Child Welfare Center (doctor or nurse)	11.7
Day nurseries	3.9
Advertisements in press and other publications	1.5
Diphtheria in district	1.2
Radio talks	1.0
Posters6
Theaters (slides and films)1
Private doctor1

The results achieved by the direct "personal" approach in getting mothers into the clinic is immediately apparent.

Another interesting conclusion which the authors reached as a result of their studies was that "... steady and continuous propaganda and education should be aimed at, rather than an annual campaign which, even if moderately successful, tends to disorganize regular clinic sessions by an influx of applicants."

\$2,000 for Rural Rodent Control

The Boards of Supervisors of El Dorado and Placer Counties have each appropriated \$1,000 to aid the rodent control program of the Department of Agriculture in their areas.

This action was taken following discussions of the supervisors with representatives of the State Departments of Public Health and Agriculture.

Two diseases in which rodents are reservoirs of infection, plague and relapsing fever are potential dangers in the two counties.

Over the last 26 years, 105 cases of relapsing fever have been reported from this area, and during 1947, bubonic plague has been demonstrated in rodents or their ectoparasites found in both counties.

* Walton, W. S., and Dorbin, R., "A Diphtheria Immunization Enquiry," *Health Education Journal*, 1947, 5:106-9.

Public Health on the March*

WILTON L. HALVERSON, M.D., Dr. P.H., State Director of Public Health

Never before has there been so much interest evidenced by so many individuals and organizations in the development of programs to safeguard the health of the people of our State.

The Public Health Assistance Bill, Chapter 1562 of the Statutes of 1947, provides an allotment of \$3,000,000 for the extension of public health service throughout the State. The same Legislature increased the state subsidy to counties for the care of the tuberculous from \$1 per patient day to a sliding scale ranging from \$1.55 in the larger counties to \$2.30 in the smaller counties, at the same time removing the restriction on the payment of subsidies to nonresident cases. Chapter 323 provides state funds to match federal and local appropriations for tax-supported institutions. Chapter 394 completely overhauls the Restaurant Act, the first major revision since 1909, and provides standards of cleanliness in restaurant operation which will be uniform throughout the State. Resolutions were also directed to the State Department of Public Health requesting studies and recommendations for community action in the control of cancer and other chronic diseases, rheumatic fever, and severely handicapped individuals.

The Public Health Assistance Bill provides that the funds made available shall be allotted according to the following formula: each county shall receive a basic allotment of \$16,000, or 60 cents per capita, whichever sum is the smaller. This means that counties of 26,000 population or less, will receive 60 cents per capita under the basic allotment. In the more populous communities this amount will be negligible from a per capita standpoint. Cities operating health departments will share in the basic allotment on a per capita basis.

The remainder of the funds will be allocated to health jurisdictions meeting standards in direct proportion to the population served. This will amount approximately to 21 cents per capita.

Standards to be met in order to be eligible for funds under this program were set by the State Board of Health on September 30th after formal approval by the California Conference of Local Health Officers; in fact, the local health officers actually developed the standards which were submitted to the State Board of Health and adopted. These additional funds will go a long way toward developing better programs for the control of tuberculosis, venereal disease, establishment of better health services for mothers and children, the

development of public health laboratory facilities, the extension of the sanitation program and the vital statistics services.

Hospital Bed Shortage

I do not wish to imply that all public health problems are solved. There is a grave shortage of hospital beds in the State at the present time. The survey of hospital facilities which is now being carried out by the State Department of Public Health indicates that there is a shortage of approximately 58,000 hospital beds if present accepted standards are used. The tabulation which follows, indicates the shortages in the various categories:

	Estimated need	Available	Shortage
General	41,625	27,525	14,100
Tuberculosis	9,920	6,885	3,035
Mental	46,250	27,450	18,800
Chronic	18,500	3,500	15,000
Convalescent	9,250	1,500	7,750
	125,545	66,860	58,685

The standards which have been set up call for 4.5 general beds per 1,000 population, five beds for hospitalization of mental illness per 1,000 population and two beds per 1,000 population for chronic and convalescent cases; 2.5 beds per annual death are required to meet the needs for the hospitalization of the tuberculous.

Hospital Construction

Hospital construction is at the present time very expensive. The lowest estimates range around \$10,000 per bed and I have recently noted that contracts have been let by the Veterans Administration for as high as \$23,000 per bed. This, of course, includes space for the extensive services which the modern hospital makes available and it should be pointed out that the floor space devoted to rooms and wards for beds does not cover more than 25 percent to 35 percent of the entire floor space.

If hospital beds could be provided at \$10,000 per bed, the cost to meet the needs in California as estimated by the survey would be \$580,000,000. Federal funds available to California to assist in hospital construction amount to less than \$2,000,000 a year for a period of five years and since the legislation specifically provides that preference should be given to rural areas and areas of low economic resources, it is safe to say little, if any, of the \$10,000,000 of federal funds will

* Presented before the General Session, League of California Cities, San Francisco, September, 1946.

be available for hospital construction in the metropolitan areas.

The Hospital District Law which authorizes the formation of hospital districts in all counties of the State with a population of less than one million through direct taxation or bond issue will provide some hospital facilities. There are 18 hospital districts now formed and more are in the process of formation. Planned county hospital construction will take care of a reasonable segment of the indigent and medically indigent population. At the present time non tax-supported hospital organizations have the opportunity of increasing their facilities to meet the needs and if these organizations are not successful in meeting the needs, the people will demand that the government assume a larger proportion of the responsibility than has heretofore been delegated to it.

Control of Tuberculosis

The other problem I would like to mention because of its great economic and social drag on society, is the control of tuberculosis. This disease causes approximately 4,000 deaths annually and half of them are in the productive age periods. More than \$15,000,000 are expended annually by the State, counties, and individuals in the care of this disease. These figures do not include the economic loss to the individual and to society because of his inability to be a producer when he is in the hospital. Nor does it include the load on welfare organizations who must often support the families of the patient while he is receiving treatment for this chronic disease.

It is high time that we approach the control of tuberculosis in humans in the same objective way the disease was controlled in dairy animals. Recently, X-ray equipment has been developed which makes possible mass surveys at a low unit cost.

Accumulating evidence indicates that the vaccination of children and young people who are associated with the tuberculous will materially reduce the incidence of the disease. The development of streptomycin and similar drugs may now make the treatment of the disease less expensive and more rapid.

On the basis of present knowledge, however, it is essential that we develop a realistic program for case finding and for the adequate treatment of the cases found. This is particularly urgent since surveys which have been done indicate that there are approximately 25,000 undiscovered cases in our State now.

Time does not permit the discussion of the other unsolved problems, but the provision of adequate hospital facilities and the development of an effective tuberculosis control program would relieve untold suffering and huge annual economic losses.

Municipalities do not ordinarily have a direct responsibility for developing hospital facilities either for the tuberculous or the general population, but municipalities have a vital interest in the provisions of the services which are so urgently needed.

Study Compares X-Ray Methods in Tuberculosis Case-Finding

When miniature film was introduced into mass tuberculosis case-finding programs, a question that immediately arose among tuberculosis control workers was, "Can consistent and reliable results comparable to those obtained with 14" x 17" celluloid film be obtained through the use of 35 mm. and other small-size films?"

Although that question cannot yet be unequivocally answered, a pair of articles in the October 3, 1947, issue of *Public Health Reports** furnishes excellent statistical data to support the use of miniature films in mass case-finding projects.

In the study reported, 1,200 individuals were examined consecutively on four different machines yielding for each a 35 mm. photofluorogram, a 4" x 10" stereophotofluorogram, a roentgenogram on 14" x 17" paper negatives and a 14" x 17" celluloid film.

These were then interpreted independently by five expert radiologists and chest specialists. A second independent interpretation was obtained from each reader on the 14" x 17" celluloid films.

After a detailed statistical analysis of the results obtained by the four techniques the conclusion was reached that, "strictly from the point of view of their ability to find cases of tuberculosis in mass survey work, none of the techniques, not even the 14" x 17" celluloid, is superior to any of the others."

The problem, in mass case-finding, then, is, as Dr. Francis Weber points out in the same publication, not film quality or film size, but film reading.

"When," says Dr. Weber, "upon two readings of a series of films, few readers can be consistent with themselves or with others, further investigation of the causes of such variation is imperative. This so-called personal equation which operates as an error-factor in film interpretation demands the most serious consideration. Until the problem is solved, it has been suggested that all survey films be read independently by at least two interpreters."†

* Yerushalmy, Jacob, Ph.D. "Statistical Problems in Assessing Methods of Modern Diagnosis, with Special Reference to X-ray Techniques," *Public Health Reports*, 62: 1432-39 (October 3, 1947).

† Neyman, J. "Outline of the Statistical Treatment of the Problem of Diagnosis," *Ibid.*, p. 1449-56.

† Weber, Francis, "Evaluating Roentgenographic Techniques," *Ibid.*, p. 1431-32.

Personnel Notes

The Bureau of Maternal and Child Health has filled vacancies in two key positions with the following appointments:

Frederic M. Kriete, M.D., Chief

Dr. Kriete enters the bureau following four years of service to the Utah State Department of Health where he was chief of the Division of Maternal and Child Health from 1945 to this year.

Miss Helen E. Walsh, Supervising Nutritionist

Miss Walsh comes to the department from the U. S. Public Health Service. Her experience also includes participation in the nutrition program of the U. S. Department of Agriculture and work with the Los Angeles County Health Department.

Film Group Produces Two Excellent Visual Aid Publications

To all who are interested in using visual aids in the community health education program, two publications of the Educational Film Library Association should be "must" reading.

First of these is a publication entitled "Making Films Work for Your Community." Although the 72-page booklet is not limited to a discussion of health films, it can be of great value to members of local health and school department staffs who are faced with the problem of making good use of films in local health programs.

A summary of chapter headings shows the scope of material presented:

The Community Film Problem.

Notes on Film Forum Management.

What Constitutes Quality in Films.

Sources of Good Films.

Effective Use of Films.

The second publication, "ABC's of Visual Aids and Projectionists Manual," answers many important questions about the care and use of projection equipment.

The booklets may be obtained for one dollar each from: The Educational Film Library Association, Suite 1000, 1600 Broadway, New York City 19, New York.

Between 15,000,000 and 20,000,000 people in the United States are hard of hearing to some extent in one or both ears.

What the best and wisest parent wants for his own child, that must the community want for all its children.—*John Dewey.*

Special Procedure for Reinterment of War Dead Established

With the return to this country of the bodies of military and civilian personnel who died in foreign countries before July 1, 1946, already underway, a special procedure for their transshipment through California or for reinterment in California has been established.

The procedure to be followed by registrars of vital statistics at the Port of Entry (San Francisco) and the area of reinterment in California will be as follows:

1. Port of Entry

The United States Government Basic Health Permit Marker which is attached to each casket will serve as a permit for the removal of the body from the Port of Entry to its final destination either within this State or through the State. This permit shall take the place of the state "transit paster" which is required for the shipment of a body on any common carrier within the State.

2. At the Area of Reinterment in California

On arrival at the terminal destination, the funeral director handling reinterment of the body shall present to the local registrar for the district wherein the reinterment is to take place, the name, rank, and serial number of the deceased, together with the United States Government Basic Health Permit Marker number attached to the outer box. The local registrar shall issue to the funeral director a Permit for Removal and Burial. The registrar shall enter the name, rank, serial number and United States Basic Health Permit Marker number on the face of this permit, enter "Repatriation" under Item 2, and complete Items 17 and 18. The local registrar will retain the carbon copy of the burial permit. The original copy of the permit will accompany the body until the interment following the usual procedure.

Influenza Vaccinations

Employees of the central office of the Los Angeles County Health Department were recently vaccinated against influenza.

The service was available only to staff members of the health department although Dr. Roy Gilbert, County Health Officer, advised all residents of the county to secure similar protection from their private physicians.

Public health is the foundation upon which rests the happiness of the people and the welfare of the state. Reform directed toward the advancement of public health must take precedence over all other.—*Disraeli.*

Approved Sanitization Methods and Compounds

Acting under provisions of the California Restaurant Act of 1947, the State Department of Public Health has approved for use in the bactericidal treatment of eating and drinking utensils the processes and quaternary ammonium compounds which are listed below. These are in addition to those methods actually described in the law.

Approved Bactericidal Processes for Eating and Drinking Utensils California Restaurant Act

(Section 28629C, Health & Safety Code)

- (1) A wet method whereby the utensil surface is maintained at a temperature of not less than 170° F. for a period of not less than 15 seconds.
- (2) Contact of the utensil surface for at least 2 minutes with a solution containing at least 200 ppm of an approved quaternary ammonium compound. (See following list of approved compounds)

Quaternary Ammonium Compounds Approved for Bactericidal Treatment of Eating and Drinking Utensils *

- Type A—Alkyl, dimethyl, benzyl, ammonium chloride
Alkyl, dimethyl, 3, 4 dichloro benzyl, ammonium chloride
Alkyl, dimethyl, benzyl, ammonium bromide
Alkyl, dimethyl, ethyl, ammonium bromide
Alkyl, trimethyl, ammonium bromide
- Type B—Para-di-isobutyl-phenoxy-ethoxy-ethyl, dimethyl, benzyl ammonium chloride (monohydrate)
Para-di-isobutyl-cresoxy-ethoxy-ethyl, dimethyl, benzyl, ammonium chloride (monohydrate)
Para-tertiary-octyl-phenoxy-ethoxy-ethyl, dimethyl, benzyl ammonium chloride
- Type C—Acyl-colomino-formyl-methyl, pyridinium chloride
Alkyl pyridinium bromide
Alkyl pyridinium iodide

The bactericidal processes listed as "approved" in Section 28629 of the law are:

a. Immersion for at least one-half minute in clean, hot water at a temperature of at least 180° F.

b. Immersion for at least one-half minute in a chlorine bath containing at least 100 parts per million at all times of available chlorine if hyperchlorites are used or a concentration of equal bactericidal efficiency if chloramines are used.

* This list may be modified from time to time by the State Department of Public Health.

A recent survey shows that during 1945 one patient was admitted to a hospital in the United States every 1.9 seconds. And a live baby was born in a hospital every 16 seconds.—*Oklahoma Health Bulletin*.

The goals of public health programs are so varied that they can never be attained by a single method of attack. Only through the teamwork of all community health agencies can there be hope for worthwhile achievement.—*Connecticut Health Bulletin*.

California Morbidity Reports Selected Diseases—Civilian Cases

Total Cases for September and Total Cases for January
Through September, 1947, 1946, 1945 and
5-Year Median (1942-1946)

Selected diseases	Current month				Cumulative			
	September				January through September			
	1947	1946	1945	5-yr. median 1942- 1946	1947	1946	1945	5-yr. median 1942- 1946
Chickenpox (varicella)...	240	266	270	326	31,965	20,789	39,500	34,118
Coccidial granuloma...	2	5	3	—	39	30	23	—
Conjunctivitis—acute infectious of the newborn (ophthalmia neonatorum)...	2	7	—	—	22	40	16	—
Diphtheria...	43	81	95	81	609	898	849	—
Dysentery, bacillary...	20	20	20	23	97	163	214	—
Encephalitis, infectious...	23	23	94	—	97	124	227	—
Epilepsy...	125	116	132	—	1,210	1,153	1,208	—
Food poisoning...	39	—	19	—	901	294	346	—
German measles (rubella)...	117	97	140	—	1,887	11,671	10,520	—
Influenza, epidemic...	13	11	29	33	747	5,203	891	—
Jaundice, infectious...	6	17	10	—	85	153	183	—
Malaria...	12	27	48	18	88	519	146	—
Measles (rubella)...	213	169	467	274	6,048	61,394	30,564	—
Meningitis, meningococci...	15	27	38	38	218	447	552	—
Mumps, (parotitis)...	453	299	741	723	14,143	17,184	32,292	—
Pneumonia, infectious...	57	105	153	175	1,263	1,907	2,734	—
Poliomyelitis, acute anterior...	101	562	188	188	669	1,671	494	—
Rabies, animal...	13	17	22	48	214	326	491	—
Rheumatic fever...	54	37	42	—	641	833	544	—
Scarlet fever...	135	263	413	315	3,941	5,784	10,806	—
Septic sore throat...	24	18	—	—	392	30	—	—
Smallpox (variola)...	—	—	—	0	2	8	4	—
Tuberculosis:								
Pulmonary...	635	627	528	627	6,851	5,829	5,832	—
Other forms...	39	43	44	43	472	382	425	—
Typhoid fever...	14	18	33	18	122	117	103	—
Typhus fever...	1	7	3	—	21	44	25	—
Undulant fever (brucellosis)...	22	23	23	23	212	222	197	—
Whooping cough (pertussis)...	501	263	687	687	7,986	3,354	12,299	—
Veneral Diseases:								
Chancroid...	27	58	27	—	437	398	190	—
Gonococcus infection...	2,497	4,145	2,391	1,767	24,391	25,063	20,383	—
Granuloma inguinale...	5	5	2	—	67	27	34	—
Lymphogranuloma venereum (lymphopathia venereum, Lymphogranuloma inguinale)...	17	17	29	—	155	158	189	—
Syphilis...	1,711	2,833	1,985	2,354	17,227	18,729	20,908	—

U.S.P.H.S. Offers Research Fellowships

Research fellowships in the field of medicine and related sciences are now being offered to qualified applicants by the United States Public Health Service.

Both predoctorate and postdoctorate fellowships are awarded. Stipends range from \$1,200 to \$3,600 per year varying with the type of fellowships awarded and whether the applicant has dependents. In addition, special research postdoctorate fellowships, for which the stipend is determined by the individual case, are awarded to applicants of outstanding ability or having specialized training.

Application forms may be obtained from the Division of Research Grants and Fellowships, National Institute of Health, Bethesda 14, Maryland.

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